**From:** Stevens, Jeffrey [Jeffrey\_Stevens@nstaronline.com]

**Sent:** Monday, July 28, 2003 4:06 PM 'baystateconsultants@attbi.com'

**Cc:** Alves, Jeffrey; Farrell, Michael; McDevitt, Tracy

Subject: Cambridge



John,

I wanted to follow up on the questions you and/or George Fernandes had relative to the sale of the streetlights.

The book value of streetlight plant for the City of Cambridge is calculated by determining the
original installed cost and subtracting from that the accumulated depreciation. Accounting
rules for both items are established by FERC and DTE regulations. There are several things
that affect the installed cost and accumulated depreciation.

## Installed Cost:

This includes the cost of materials and labor to install the plant. It also includes applicable overheads such as labor (benefits), supervision, stores and transportation. For streetlights, these amounts are accumulated in plant account 373.

When plant is retired, its original installed cost is removed from both the 373 account and the related accumulated depreciation account. Any salvage value received is credited to the accumulated depreciation account.

## Accumulated Depreciation:

The accumulated depreciation related to streetlights was last reviewed by the Department in Cambridge Electric Light Company's (CEL) most recent base rate case, DPU 92-250.

The Company records streetlight depreciation each month by multiplying the gross streetlight plant by the Department approved depreciation rates. The entry for this is a debit to Depreciation Expense and a credit to Accumulated Depreciation.

As noted above, retirements are removed from accumulated depreciation at their original cost.

## Vintage year book value:

To determine the book value by vintage year, the original costs for that year is known from Company records. The accumulated depreciation in total is associated with the vintage year dollars using what are known in the industry as "lowa Curves". These curves were developed to replicate plant mortality rates.

Although it is often convenient to assume average service lives and conclude that plant must be fully depreciated at the end of that life, this is not accurate. In fact, if a unit of property has an expected average life of 15 years, it may well be still in service many years later. The remaining average life of that plant is not zero (nor is it a negative number), it is a remaining positive number of years. The lowa curves simulate this. Put in more understandable terms, if the average life expectancy of a person born in 1920 is 80 years, that does not mean that all people born in 1920 are already dead. The average life expectancy of a person born in 1920 who is still alive today might be 10 more years. Thus the use of average service lives when determining depreciation rates is a convention for spreading the remaining book value of the plant over the expected remaining average service life.

## **Current Book Value**

The current book value of streetlights in Cambridge is easily determined from the Company's records. The original cost is in the 373 account. The accumulated depreciation related to streetlights is taken from the detail accounts making up the accumulated depreciation account. The current book value of all the lights in Cambridge is simply determined by subtracting the accumulated depreciation from the original cost. In order to determine the value of the lights that the City proposes to buy, it is necessary to perform an allocation of the book value by vintage year. We have based this allocation on the number of lights installed in each year. For example, if the company installed 50 lights in a year, and 40 of them were for the City of Cambridge, then 80 percent (40/50) of the book value of the lights in that vintage year is allocated to the City of Cambridge.

2. Since CEL's last rate case the composite street light deprecation rate was 6.14%, as approved. Depreciation rates are available from the FERC Annual Reports, Page 337. The information is reported every 5 years or when there is a change in depreciation rates. Based on a review of readily available information, the following street lighting account depreciation rates were in effect from time to time:

12/31/73 6.46% 12/31/78 5.00% 12/31/86 4.50% 12/31/91 6.10% 06/30/92 6.14%

- 3. The Company has determined that the price quoted Cambridge in 1997 was calculated based on faulty assumptions that did not accurately determine the book value of the lights. It is not possible to reconcile the results of the two disparate methods.
- 4. The MDC, Private and City lights are broken down by Account and/or class by vintage year in DPRS. By calling for City accounts we get a run by vintage of all City lights. We can call up the remaining lights by vintage and for each year we can determine by class the number of private and city lights by vintage. The split in lights for each vintage year is based on counts of lights installed in those years. In the earliest years, an assumption of a standard split was used baring explicit knowledge otherwise.
- 5. The issue of the correct price for Cambridge's lights is very simple to determine since Cambridge Electric operates in only one municipality. Please see the discussion in item 1 above. The Department's Order in D.T.E. 01-25 was specific to Commonwealth Electric Company. Cambridge Electric is a separate and distinct company. The Company does not believe that the methodology ordered by the Department in D.T.E. 01-25 is appropriate for determining the value of the streetlight equipment in Cambridge.
- 6. We have attached an electronic version of the pricing information provided to you at our July 9<sup>th</sup> meeting.

Please let me know if you would still like to have a telephone conference call on Wednesday July 30<sup>th</sup> at 10:00am or if you would like to reschedule for another time.

Thank you,

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